



<b>FORM 1449</b> <b>INFORMATION DISCLOSURE STATEMENT</b> <b>BY APPLICANT</b>	Docket: 899-50283	Ser: 09/130,887
Applicant: Bruce G. Gold		
Filed: August 7, 1998		Group: 1645

**U.S. PATENT DOCUMENTS**

Init*	Number	Date	Name	Class	Sub	Filed
LL	3,595,955	7/27/1971	De Boer et al.			
	3,987,035	10/19/1976	Rinehart, Jr. et al.			
	4,075,339	2/21/1978	Rinehart, Jr. et al.			
	4,261,989	4/14/1981	Sasaki et al.			
	5,192,773	3/9/1993	Armistead et al.			
	5,330,993	7/19/1994	Armistead et al.			
	5,387,584	2/7/95	Schnur			
	5,516,797	5/14/1996	Armistead et al.			
	5,525,523	6/11/1996	Soldin			
	5,612,350	3/18/1997	Or et al.			
	5,614,547	3/25/1997	Hamilton et al.			
	5,622,970	4/22/1997	Armistead et al.			
	5,639,592	6/17/1997	Evans et al.			
	5,654,332	8/5/1997	Armistead			
	5,665,774	9/9/1997	Armistead et al.			
	5,717,092	2/10/1998	Armistead et al.			
↓	5,786,378	7/28/1998	Hamilton et al.			

**FOREIGN PATENT DOCUMENTS**

	Number	Date	Country	Class	Sub	
LL	WO 92/04370	3/19/1992	PCT			
	WO 92/19593	11/12/1992	PCT			
	WO 92/19745	11/12/1992	PCT			
	WO 92/21313	12/10/1992	PCT			
	WO 93/07269	4/15/1993	PCT			
↓	WO 93/14215	7/22/1993	PCT			

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LL		WO 93/23548	11/25/1993	PCT			
		WO 96/40633	12/19/1996	PCT			
		WO 96/41609	12/27/1996	PCT			
		WO 98/20891	5/22/1998	PCT			
		WO 98/20892	5/22/1998	PCT			
		WO 98/20893	5/22/1998	PCT			
<b>OTHER DOCUMENTS</b>							
LL		An et al., Depletion of p185 <sup>erbB2</sup> , Raf-1 and Mutant p53 Proteins by Geldanamycin Derivatives Correlates with Antiproliferative Activity, <i>Cancer Chemother. Pharmacol.</i> 40:60-64 (1997).					
	<del>X</del>	Armistead et al., Design, Synthesis and Structure of Non-macrocyclic Inhibitors of FKBP12, the Major Binding Protein for the Immunosuppressant FK506, <i>Acta Cryst</i> D51:522-528 (1995).					
		Czar et al., Geldanamycin, a Heat Shock Protein 90-Binding Benzoquinone Ansamycin, Inhibits Steroid-Dependent Translocation of the Glucocorticoid Receptor from the Cytoplasm to the Nucleus, <i>Biochemistry</i> 36:7776-7785 (1997).					
		Gold et al., A Nonimmunosuppressant FKBP-12 Ligand Increases Nerve Regeneration, <i>Experimental Neurology</i> 147:269-278 (1997).					
		Grenert et al., The Amino-terminal Domain of Heat Shock Protein 90 (hsp90) That Binds Geldanamycin Is an ATP/ADP Switch Domain That Regulates hsp90 Conformation, <i>The Journal of Biological Chemistry</i> 272:23843-23850 (1997).					
		Hamilton, G.S., and Steiner J.P., Neuroimmunophilin Ligands as Novel Therapeutics for the Treatment of Degenerative Disorders of the Nervous System, <i>Current Pharmaceutical Design</i> 3:405-428 (1997).					
		Hamilton et al., FKBP12-Binding Domain Analogues of FK506 Are Potent, Nonimmunosuppressive Neurotrophic Agents in Vitro and Promote Recovery in a Mouse Model of Parkinson's Disease, <i>Bioorganic and Medical Chemistry Letters</i> 7:1785-1790 (1997).					
		Hartson et al., Modular Folding and Evidence for Phosphorylation-Induced Stabilization of an hsp90-dependent Kinase, <i>The Journal of Biological Chemistry</i> 273:8475-8482 (1998).					
		Johnson, J.L., and Toft, D.O., Binding of p23 and hsp90 During Assembly with the Progesterone Receptor, <i>Molecular Endocrinology</i> 9:670-678 (1995).					

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LL		Lawson et al., Geldanamycin, an hsp90/GRP94-Binding Drug, Induces Increased Transcription of Endoplasmic Reticulum (ER) Chaperones via the ER Stress Pathway, <i>Journal of Cellular Physiology</i> 174:170-178 (1998).	
		Owens-Grillo et al., The Cyclosporin A-binding Immunophilin CyP-40 and the FK506-binding Immunophilin hsp56 Bind to a Common Site on hsp90 and Exist in Independent Cytosolic Heterocomplexes with the Untransformed Glucocorticoid Receptor, <i>The Journal of Biological Chemistry</i> 270:20479-20484 (1995).	
		Owens-Grillo et al., Binding of Immunophilins to the 90 kDa Heat Shock Protein (hsp90) via a Tetratricopeptide Repeat Domain Is a Conserved Protein Interaction in Plants, <i>Biochemistry</i> 35:15249-15255 (1996).	
		Owens-Grillo et al., A Model of Protein Targeting Mediated by Immunophilins and Other Proteins That Bind to hsp90 via Tetratricopeptide Repeat Domains, <i>The Journal of Biological Chemistry</i> 271:13468-13475 (1996).	
		Pratt, W.B., The Role of the hsp90-based Chaperone System in Signal Transduction by Nuclear Receptors and Receptors Signaling Via MAP Kinase, <i>Annu. Rev. Pharmacol. Toxicol.</i> 37:297-326 (1997).	
		Pratt, W.B., The hsp90-based Chaperone System: Involvement in Signal Transduction from a Variety of Hormone and Growth Factor Receptors, <i>Minireview: Department of Pharmacology, The University of Michigan Medical School</i> , 420-434 (1998).	
		Pratt, W.B. and Toft, D.O., Steroid Receptor Interactions with Heat Shock Protein and Immunophilin Chaperones, <i>Endocrine Reviews</i> 18:306-360 (1997).	
		Radanyi et al., The Ability of the Immunophilin FKBP59-HBI to Interact with the 90-kDa Heat Shock Protein is Encoded by its Tetratricopeptide Repeat Domain, <i>Proc. Natl. Acad. Sci. USA</i> 91:11197-11201 (1994).	
		Ratajczak, T. and Carrello, A. Cyclophilin 40 (CyP-40), Mapping of Its hsp90 Binding Domain and Evidence That FKBP52 Competes with CyP-40 for hsp90 Binding, <i>The Journal of Biological Chemistry</i> , 271:2961-2965 (1996).	
		Sanchez, E.R. and Ning, Y-M., Immunophilins, Heat Shock Proteins, and Glucocorticoid Receptor Actions <i>in Vivo</i> , <i>Methods</i> 9:188-200 (1996).	
		Scheibel et al., Two Chaperone Sites in Hsp90 Differing in Substrate Specificity and ATP Dependence, <i>Proc. Natl. Acad. Sci. USA</i> 95:1495-1499 (1998).	
↓		Schnur et al., <i>erbB-2</i> Oncogene Inhibition by Geldanamycin Derivatives: Synthesis, Mechanism of Action, and Structure-Activity Relationships, <i>J. Med. Chem.</i> 38:3813-3820 (1995).	

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		Schulte et al., Disruption of the Raf-1-Hsp90 Molecular Complex Results in Destabilization of Raf-1 and Loss of Raf-1-Ras Association, <i>The Journal of Biological Chemistry</i> 270:24585-24588 (1995).	
		Smith, D.F., Dynamics of Heat Shock Protein 90-Progesterone Receptor Binding and the Disactivation Loop Model for Steroid Receptor Complexes, <i>Molecular Endocrinology</i> 7:1418-1429 (1993).	
		Stancato et al., The hsp90-binding Antibiotic Geldanamycin Decreases Raf Levels and Epidermal Growth Factor Signaling without Disrupting Formation of Signaling Complexes or Reducing the Specific Enzymatic Activity of Raf Kinase, <i>The Journal of Biological Chemistry</i> 272:4013-4020 (1997).	
		Stebbins et al., Crystal Structure of an Hsp90-Geldanamycin Complex: Targeting of a Protein Chaperone by an Antitumor Agent, <i>Cell</i> 89:239-250 (1997).	
		Steiner et al., Neurotrophic Immunophilin Ligands Stimulate Structural and Functional Recovery in Neurodegenerative Animal Models, <i>Proc. Natl. Acad. Sci. USA</i> 94:2019-2024 (1997).	
	X	Steiner et al., Neurotrophic Actions of Nonimmunosuppressive Analogues of Immunosuppressive Drugs FK506, Rapamycin and Cyclosporin A, <i>Nature Medicine</i> 3:421-428 (1997).	
		Tanzer L. and Jones K.J., Gonadal Steroid Regulation of Hamster Facial Nerve Regulation: Effects of Dihydrotestosterone and Estradiol, <i>Experimental Neurology</i> 146:258-264 (1997).	
		Walsh et al., Cyclosporin A, the Cyclophilin Class of Peptidylprolyl Isomerases, and Blockade of T Cell Signal Transduction, <i>The Journal of Biological Chemistry</i> 267:13115-13118 (1992).	
		Whitesell et al., Inhibition of Heat Shock Protein HSP90-pp60 <sup>v-src</sup> Heteroprotein Complex Formation by Benzoquinone Ansamycins: Essential Role for Stress Proteins in Oncogenic Transformation, <i>Proc. Natl. Acad. Sci. USA</i> 91:8324-8328 (1994).	
	Whitesell et al., The Physical Association of Multiple Molecular Chaperone Proteins with Mutant p53 Is Altered by Geldanamycin, an hsp90 Binding Agent, <i>Molecular and Cellular Biology</i> 18:1517-1524 (1998).		
Examiner: <i>[Signature]</i>		Date: 11/03/99	
*Examiner: Initial if considered, whether or not in conformance with MPEP 60; draw line through cite if not in conformance and not considered. Send copy.			